

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Continuation Application:

Timothy W. CONNER, *et al.*

Appln. No.: To Be Assigned

Filed: Herewith

For: Nucleic Acid Molecules and Other  
Molecules Associated with  
Transcription in Plants

Art Unit: To Be Assigned

Examiner: To Be Assigned

Atty. Docket: 16517.254

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, DC 20231

Sir:

Prior to examination on the merits, Applicants hereby request entry of the following amendments in the above-captioned application:

**AMENDMENT**

**In the Specification:**

Please amend the specification as follows:

In the specification, please replace the paragraph, beginning at page 1, line 3, and ending at page 2, line 20 with the following paragraph:

**CROSS-REFERENCE TO RELATED APPLICATIONS**

This application is a continuation of U.S. Patent Application Serial No. 09/229,413 filed January 12, 1999, herein incorporated by reference. This application claims priority under 35 U.S.C. § 119(e) and/or 35 U.S.C. § 120 of applications No. 60/067,000 filed November 24, 1997; No. 60/069,472 filed December 9, 1997; No. 60/071,479 filed January 13, 1998; No. 60/074,201 filed February 10, 1998; No. 60/074,282 filed February 10, 1998; No. 60/074,280 filed February 10, 1998; No. 60/074,281 filed February 10, 1998; No. 60/074,566 filed February

12, 1998; No. 60/074,567 filed February 12, 1998; No. 60/074,565 filed February 12, 1998; No. 60/075,462 filed February 19, 1998; No. 60/074,789 filed February 19, 1998; No. 60/075,459 filed February 19, 1998; No. 60/075,461 filed February 19, 1998; No. 60/075,464 filed February 19, 1998; No. 60/075,460 filed February 19, 1998; No. 60/075,463 filed February 19, 1998; No. 60/077,231 filed March 9, 1998; No. 60/077,229 filed March 9, 1998; No. 60/077,230 filed March 9, 1998; No. 60/078,368 filed March 18, 1998; No. 60/080,844 filed April 7, 1998; No. 60/083,067 filed April 27, 1998; No. 60/083,386 filed April 29, 1998; No. 60/083,387 filed April 29, 1998; No. 60/083,388 filed April 29, 1998; No. 60/083,389 filed April 29, 1998; No. 60/085,224 filed May 13, 1998; No. 60/085,223 filed May 13, 1998; No. 60/085,222 filed May 13, 1998; No. 60/085,533 filed May 15, 1998; No. 60/086,186 filed May 21, 1998; No. 60/086,187 filed May 21, 1998; No. 60/086,185 filed May 21, 1998; No. 60/086,184 filed May 21, 1998; No. 60/086,183 filed May 21, 1998; No. 60/086,188 filed May 21, 1998; No. 60/089,524 filed June 16, 1998; No. 60/089,810 filed June 18, 1998; No. 60/089,814 filed June 18, 1998; No. 60/089,808 filed June 18, 1998; No. 60/089,812 filed June 18, 1998; No. 60/089,807 filed June 18, 1998; No. 60/089,806 filed June 18, 1998; No. 60/089,813 filed June 18, 1998; No. 60/089,811 filed June 18, 1998; No. 60/089,793 filed June 18, 1998; No. 60/091,405 filed June 30, 1998; No. 60/091,247 filed June 30, 1998; No. 60/099,667 filed September 9, 1998; No. 60/099,668 filed September 9, 1998; No. 60/099,670 filed September 9, 1998; No. 60/099,697 filed September 9, 1998; No. 60/100,674 filed September 16, 1998; No. 60/100,673 filed September 16, 1998; No. 60/100,672 filed September 16, 1998; No. 60/100,963 filed September 17, 1998; No. 60/101,131 filed September 21, 1998; No. 60/101,132 filed September 21, 1998; No. 60/101,130 filed September 21, 1998; No. 60/101,508 filed September 22, 1998; No. 60/101,344 filed September 22, 1998; No. 60/101,347 filed September 22, 1998; No. 60/101,343 filed September 22, 1998; No. 60/101,707 filed September 25, 1998; No. 60/104,126 filed October 13, 1998; No. 60/104,128 filed October 13, 1998; No. 60/104,127 filed October 13, 1998; No. 60/104,124 filed October 13, 1998; No. 60/109,018 filed November 18, 1998; No. 60/108,996 filed November 18, 1998; No. 09/199,129 filed November 24, 1998; No. 09/210,297 filed December 8, 1998; No. 60/111,981 filed December 11, 1998; and No.

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60/113,224 filed December 22, 1998, all of which are herein incorporated by reference in their entirety.

In the specification on page 2, line 21, please add the following paragraph:

#### INCORPORATION OF SEQUENCE LISTING

Two copies of the sequence listing (Copy 1 and Copy 2) and a computer readable form (CRF) of the sequence listing, all on CD-ROMs, each containing the file named 16517-235 seq listing.txt, which is 1,929,701 bytes (measured in MS-DOS) and created on August 6, 2001, are herein incorporated by reference.

In the specification, please replace the paragraph, beginning at page 26, line 4, and ending at page 26, line 12, with the following paragraph:

Similarity analysis includes database search and alignment. Examples of public databases include the DNA Database of Japan (DDBJ)([www.ddbj.nig.ac.jp/](http://www.ddbj.nig.ac.jp/)); Genbank ([www.ncbi.nlm.nih.gov/Web/Search/Index.html](http://www.ncbi.nlm.nih.gov/Web/Search/Index.html)); and the European Molecular Biology Laboratory Nucleic Acid Sequence Database (EMBL) ([www.ebi.ac.uk/ebi\\_docs/embl\\_db/embl-db.html](http://www.ebi.ac.uk/ebi_docs/embl_db/embl-db.html)). Other appropriate databases include dbEST ([www.ncbi.nlm.nih.gov/dbEST/index.html](http://www.ncbi.nlm.nih.gov/dbEST/index.html)), SwissProt ([www.ebi.ac.uk/ebi\\_docs/swisprot\\_db/swisshome.html](http://www.ebi.ac.uk/ebi_docs/swisprot_db/swisshome.html)), PIR ([www-nbrt.georgetown.edu/pir/](http://www-nbrt.georgetown.edu/pir/)) and The Institute for Genome Research ([www.tigr.org/tdb/tdb.html](http://www.tigr.org/tdb/tdb.html)).

In the specification, please replace the paragraph, beginning at page 65, line 19, and ending at page 66, line 2, with the following paragraph:

A PCR probe is a nucleic acid molecule capable of initiating a polymerase activity while in a double-stranded structure with another nucleic acid. Various methods for determining the structure of PCR probes and PCR techniques exist in the art. Computer generated searches using

Variable	Mean	SD	Min	Max
Age	34.5	10.2	21	55
Gender	0.5	0.5	0	1
Marital status	0.6	0.5	0	1
Education	12.5	1.5	9	16
Income	1500	500	500	3000
Health status	0.8	0.2	0	1
Smoking status	0.3	0.5	0	1
Alcohol consumption	0.2	0.4	0	1
Exercise frequency	0.5	0.5	0	1
Stress level	0.7	0.3	0	1
Sleep quality	0.6	0.4	0	1
Work satisfaction	0.5	0.5	0	1
Life satisfaction	0.6	0.4	0	1
Depression score	10.5	5.0	0	30
Anxiety score	12.0	6.0	0	30
Quality of life score	75.0	10.0	50	100

**In the Claims:**

Please add the following claims first, then cancel claims 1-9:

10. (New) An isolated maize, soybean or *Arabidopsis thaliana* transcription factor or fragment thereof, wherein said maize, soybean or *Arabidopsis thaliana* transcription factor or fragment thereof is encoded by a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 3853.
11. (New) An isolated nucleic acid molecule comprising a sequence that hybridizes under conditions of 6.0 X sodium chloride/sodium citrate (SSC) at about 45°C, followed by a wash of 2.0 X SSC at 50°C to SEQ ID NO: 1 through SEQ ID NO: 3853 and complements thereof.
12. (New) The isolated nucleic acid molecule according to claim 11, wherein said nucleic acid molecule comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 3853.
13. (New) A method of producing a plant containing an overexpressed plant transcription factor comprising:
  - (A) transforming said plant with a functional first nucleic acid molecule, wherein said functional first nucleic acid molecule comprises a promoter region, wherein said promoter region is linked to a structural region, wherein said structural region comprises a second nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 3853; wherein said structural region is linked to a 3' non-translated sequence that functions in the plant to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of a mRNA molecule; and wherein said functional first nucleic acid molecule results in overexpression of the plant transcription factor; and
  - (B) growing said plant.

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**REMARKS**

**I. Claims**

Claims 10-13 have been added and claims 1-9 have been cancelled. Support for new claims 10-13 may be found throughout the specification. No new matter enters by these claims. The application presently contains claims 10-13.

**II. Sequence Listing**

Enclosed is a sequence listing that has been updated to reflect the new priority information and application serial number and contains no new matter.

**III. Specification**

The specification has been amended to update cross-reference to related application information, and to correct typographical errors. No new matter enters by these amendments.

The specification has been amended to remove "http://" and underlining on page 26 and underlining on page 65 of the specification.

The presently pending claims are believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. The Examiner is respectfully requested to contact Applicant's undersigned representative at 202.942.5071 to address any unresolved issues remaining in this application.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 50-1824 referencing charge number 16517.254.

Respectfully submitted,



David R. Marsh (Reg. No. 41,408)

Andrew S. Brenc (Reg. No. 45,534)

Date:

08/06/01

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### Marked up Specification

In the Specification:

On page 1, line 3 – page 2, line 20:

#### CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of U.S. Patent Application Serial No. 09/229,413 filed January 12, 1999, herein incorporated by reference. This application claims priority under 35 U.S.C. § 119(e) and/or 35 U.S.C. § 120 of applications No. 60/067,000 filed November 24, 1997; No. 60/069,472 filed December 9, 1997; No. 60/071,479 filed January 13, 1998; No. 60/074,201 filed February 10, 1998; No. 60/074,282 filed February 10, 1998; No. 60/074,280 filed February 10, 1998; No. 60/074,281 filed February 10, 1998; No. 60/074,566 filed February 12, 1998; No. 60/074,567 filed February 12, 1998; No. 60/074,565 filed February 12, 1998; No. 60/075,462 filed February 19, 1998; No. 60/074,789 filed February 19, 1998; No. 60/075,459 filed February 19, 1998; No. 60/075,461 filed February 19, 1998; No. 60/075,464 filed February 19, 1998; No. 60/075,460 filed February 19, 1998; No. 60/075,463 filed February 19, 1998; No. 60/077,231 filed March 9, 1998; No. 60/077,229 filed March 9, 1998; No. 60/077,230 filed March 9, 1998; No. 60/078,368 filed March 18, 1998; No. 60/080,844 filed April 7, 1998; No. 60/083,067 filed April 27, 1998[,] ± [ "Nucleic Acid Molecules and Other Molecules Associated with Plants.(soymon016)" docket No. 38-21(15348)A ] No. 60/083,386 filed April 29, 1998; No. 60/083,387 filed April 29, 1998; No. 60/083,388 filed April 29, 1998; No. 60/083,389 filed April 29, 1998; No. 60/085,224 filed May 13, 1998; No. 60/085,223 filed May 13, 1998; No. 60/085,222 filed May 13, 1998; No. 60/085,533 filed May 15, 1998; No. 60/086,186 filed May 21, 1998; No. 60/086,187 filed May 21, 1998; No. 60/086,185 filed May 21, 1998; No. 60/086,184 filed May 21, 1998; No. 60/086,183 filed May 21, 1998; No. 60/086,188 filed May 21, 1998; No. 60/089,524 filed June 16, 1998; No. 60/089,810 filed June 18, 1998; No. 60/089,814 filed June 18, 1998; No. 60/089,808 filed June 18, 1998; No. 60/089,812 filed June 18, 1998; No. 60/089,807 filed June 18, 1998; No. 60/089,806 filed June 18, 1998; No. 60/089,813 filed June 18, 1998; No. 60/089,811 filed June 18, 1998; No. 60/089,793 filed June 18, 1998; No. 60/091,405 filed June 30, 1998[,] ± [ "Nucleic acid molecules and other



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molecules associated with the Plant Sugar and Nitrogen Transporters Pathway" docket No. 38-21(15412)A ] No. 60/091,247 filed June 30, 1998; No. 60/099,667 filed September 9, 1998; No. 60/099,668 filed September 9, 1998; No. 60/099,670 filed September 9, 1998; No. 60/099,697 filed September 9, 1998; No. 60/100,674 filed September 16, 1998; No. 60/100,673 filed September 16, 1998; No. 60/100,672 filed September 16, 1998; No. 60/100,963 filed September 17, 1998; No. 60/101,131 filed September 21, 1998; No. 60/101,132 filed September 21, 1998; No. 60/101,130 filed September 21, 1998; No. 60/101,508 filed September 22, 1998; No. 60/101,344 filed September 22, 1998; No. 60/101,347 filed September 22, 1998; No. 60/101,343 filed September 22, 1998; No. 60/101,707 filed September 25, 1998; No. 60/104,126 filed October 13, 1998; No. 60/104,128 filed October 13, 1998; No. 60/104,127 filed October 13, 1998; No. 60/104,124 filed October 13, 1998; No. 60/109,018 filed November 18, 1998; No. 60/108,996 filed November 18, 1998[,] ; [ "Nucleic Acid Molecules and Other Molecules Associated With Plants" docket No. 38-21(15075)B filed November 24, 1998, "Nucleic Acid Molecules and Other Molecules Associated With Plants" docket No. 38-21(15076)B filed December 8, 1998, "Nucleic acid Molecules and other Molecules associated with Plants" docket No. 38-21(15668)A filed December 11, 1998 and "Nucleic acid molecules and other molecules associated with plants" docket No. 38-21(15721)A filed December 22, 1998 ] No. 09/199,129 filed November 24, 1998; No. 09/210,297 filed December 8, 1998; No. 60/111,981 filed December 11, 1998; and No. 60/113,224 filed December 22, 1998, all of which are herein incorporated by reference in their entirety.

On page 26, lines 4-12:

Similarity analysis includes database search and alignment. Examples of public databases include the DNA Database of Japan (DDBJ)( [[http://](http://www.ddbj.nig.ac.jp/)] [www.ddbj.nig.ac.jp/](http://www.ddbj.nig.ac.jp/)) (*underlining removed*); Genbank ( [[http://](http://www.ncbi.nlm.nih.gov/Web/Search/Index.html)] [www.ncbi.nlm.nih.gov/Web/Search/Index.html](http://www.ncbi.nlm.nih.gov/Web/Search/Index.html)) (*underlining removed*); and the European Molecular Biology Laboratory Nucleic Acid Sequence Database (EMBL) ( [[http://](http://www.ebi.ac.uk/ebi_docs/embl_db/embl-db.html)] [www.ebi.ac.uk/ebi\\_docs/embl\\_db/embl-db.html](http://www.ebi.ac.uk/ebi_docs/embl_db/embl-db.html)) (*underlining*

removed). Other appropriate databases include dbEST ( [http://]  
www.ncbi.nlm.nih.gov/dbEST/index.html) (*underlining removed*), SwissProt ( [http://]  
www.ebi.ac.uk/ebi\_docs/swisprot\_db/swisshome.html) (*underlining removed*), PIR ( [http://]  
www-nbrt.georgetown.edu/pir/) (*underlining removed*) and The Institute for Genome Research  
([http://] www.tigr.org/tdb/tdb.html) (*underlining removed*).

On pages 65, line 19-page 65, line 2:

A PCR probe is a nucleic acid molecule capable of initiating a polymerase activity while  
in a double-stranded structure [to] with another nucleic acid. Various methods for determining  
the structure of PCR probes and PCR techniques exist in the art. Computer generated searches  
using programs such as Primer3 (www-genome.wi.mit.edu/cgi-bin/primer/primer3.cgi)  
(*underlining removed*), STSPipeline (www-genome.wi.mit.edu/cgi-bin/www-STS\_Pipeline)  
(*underlining removed*), or GeneUp (Pesole *et al.*, *BioTechniques* 25:112-123 (1998) the entirety  
of which is herein incorporated by reference), for example, can be used to identify potential PCR  
primers.

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